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THE GENESEE FARMER.

SATURDAY, AUGUST 10, 1839.

"THE DEBT-PAYING NATION."

This is the name which the United States have acquired abroad, and never was an appellation better deserved. We, as a nation, run in debt more to others, than perhaps all other nations put together. What would be said if Great Britain should run in debt two hundred millions to France, or Prussia fifty millions to Austria. We, on the contrary, think nothing of selling our credit to the amount of a hundred or two of millions, in the shape of stocks, and then purchase goods annually to the amount of some twenty millions more than we can pay at the time, trusting to luck and tempting Providence. It requires no prophetic sagacity to foretell that matters cannot always go on at this rate. Our credit must be over-taxed in time, and though our resources are immense, a sudden invitation to 'hand over' would produce a convulsion, of which we who remember 1837, may form a faint conception; a convulsion in which the credit and the floating capital of the country would alike go to ruin. The individual is on the high road to bankruptcy, whose average expenses exceed his annual income, and the same is equally true of nations. How stands the matter with us in this respect?

In 1837 we imported in flour and wheat,...	$4,276,776
In the same time we exported of the same,.	3,075,475
Leaving a balance against us of.....	$1,201,201 for our bread.
In 1837 we imported of sugar,.....	$7,203,904
And we exported,.....	76,181
Leaving against us a balance of.....	$7,129,723 for our sugar.
In 1837 the whole of our imports was..	$140,989,217
And the sum total of our exports was..	117,419,276
Leaving against us a balance of....	$23,569,941

But it will be said, this balance is paid, and the debt cancelled. So it is, but how? by transferring the account from the individuals who contracted it, to the country itself. In other words, this twenty-three millions and many more similar balances of trade against us, has been paid in stocks, or the credit of the states has been loaned to secure the foreign dealer. These balances of trade against us *are not paid*, and when they will be, if we continue to buy much and sell little, is beginning to be a serious question. We are in a fair way to have a national debt accumulated upon us equal to that of Great Britain; a debt, to pay the interest of which, is now weighing her agriculturists and manufacturers to the dust. The only difference will be, her indebtedness is to her own citizens; ours will be to foreigners, and a fearful power it will be for them to wield over us.

How shall this alarming evil be remedied? It would be easy to say, retrench? buy less, and sell more. But such is not usually the course of individuals or nations. We have gratified our wants until they have become so interwoven with our system, that retrenchment in the means of satisfying them is not likely to be a favorite doctrine, however just and feasible it may be. The only way, then, for us, if we will have just so such, is *either to produce the things ourselves, or something that will pay for them.* We *can* raise our own *bread*, and have a large surplus to sell. We can make all the *sugar* demanded in the country, and we must do it. We can make the silk wanted in the United States, and if we are wise we shall soon do it, and put a stop to the largest item in the balance against us; an item of from fifteen to twenty millions annually. Supply ourselves with these three items, and we turn the balance of trade in our favor, and bring the world in debt to us. In that case we should become a 'debt-receiving' instead of a 'debt-paying nation,' and the difference there is between the actual pleasure of these two operations, (to say nothing of the profit,) will be appreciated by most.

Good Effects of Draining Lands.

The effect which the freeing retentive subsoils from their surplus water has on the texture of the soil, does not appear to be understood or appreciated by many of our farmers. A very considerable portion of our country consists of soils of this kind, and to be cultivated successfully, and produce what they are obviously capable of, they must be first freed from surplus water. This can be done partially by deeper ploughing, but only effectually by thorough draining. If the roots of common cultivated plants reach stagnant water, and such is usually found at a short distance where a retentive subsoil exists, such a plant cannot flourish. We have found by experience, that there are many of our hard-pans that contain so much silicious matter, that when thrown up to the air, and subjected to freezing and æration, it pulverizes readily, and when mixed with animal or vegetable manures, is capable of producing good crops of grain or roots. Thorough draining, in a great measure, produces the same results, on similar soils. There are some of the hard-pans that contain so much clay, that simple æration, or draining, will not render them suitable for crops, the roots of which penetrate the earth deeply. We have the present season had a demonstration of the excellent effect produced by draining. Land that was formerly so wet, and even miry, that it was constantly poached by the feet of cattle, and rarely or never dry on the surface, has been converted into dry arable land by a few well directed under drains. We wish our farmers generally, who have lands of this description, would try the effect of this method of improving their farms. We think they would be amply rewarded.

SILK MANUFACTURING.

One great reason why we have such an unshaken confidence in the ability of this country to enter successfully into the culture of silk, its manufacture as well as its production, is found in the superior enterprise, industry and ingenuity of our citizens over those of any part of the world. Great Britain thought to prevent the establishment of the cotton manufacture in this and other countries, by prohibiting, under severe penalties, the exportation of machinery, or patterns for its construction. New England machinists went to work, built shops, made their own patterns, and produced specimens of machinery so much superior in action and principle to European models, that we at once obtained the preference in their own market, and now annually export large quantities of machinery to order. So it is already with machinery for the manufacture of silk. In reeling, and now in weaving the narrow kinds of silk, such as laces, ribbons, and other goods of that description, we have already made great advances on the clumsy and ill-arranged implements of the old world.

In the manufacture of ribbons, which forms so important a branch of the Lyons, or French silk manufacture, the foreign workman uses a narrow loom, resembling the common hand loom in other respects, and weaving but one piece of ribbon at a time. A machine, called in France a Jacquard, is attached to this narrow loom, and regulates the pattern of the ribbon, flowers, &c. These looms are worked by girls, and these delicate and beautiful fabrics are the result of their labors. A Jacquard was brought to New-York, and fell under the notice of Mr. Bergen, and ingenious mechanic, and member of the Legislature. Mr. Bergen instantly saw that great improvements might be made in the machine and loom, and immediately constructed one which is worked by power instead of the hand, makes seven pieces of ribbon or lace, where only one was made in the French loom, and gives the figure, color, or pattern with equal exactness and greater rapidity. In this single improvement of the ribbon loom, then, five or six-sevenths of the labor required abroad is wholly dispensed with, and articles of any pattern can at once be furnished. In very narrow patterns, from ten to fifteen pieces can be woven at once. Such improvements at the outset leave no room for doubt, but that when the attention of our artizans shall be directed to the manufacture of silk machinery, we shall soon find our improved processes amply to compensate for any supposed difference in the price of labor.

Depth of Frozen Earth in Northern Latitude.

Mr. Schergin, a merchant of Jakutsk in Siberia, anxious to possess a well from which water might be obtained without being obliged to use melted ice for half the year, commenced boring through the frozen earth which always exists at a short distance below the surface, with the intention of reaching the unfrozen springs below. The place is in lat. 62° the thermometer in December as low as 42° below zero, and in July was 79° above. Average temperature 18°. After penetrating 50 feet, the temperature was found to be 18°. At 77 feet 19°. At 119 feet 23°. At 382 feet 30°. This rate gives an increase of temperature of 1° for every 60 feet; and proves that the boring to unfrozen water must equal about 600 feet. As a necessary consequence, the large rivers and springs in such districts must draw their supplies from regions farther south, or from below the frozen strata, or they would be dry every winter, which in Siberia is found to be the fact with most of them. Wrangel and Frebre state that in Siberia, in the open lands, the surface thawed during the summer to the depth of 2 1-2 to five feet; but that in the forests it only reached from 3-4 foot to 1 1-2 in depth. This is a curious fact, as showing how near vegetation can be brought in contact with ice, and that growth in plants depends more on the temperature of the air in the spring, than on that of the soil.

Temperature in Great Britain and the United States.

While the average temperature of the year in England exceeds that of the northern part of the United States, the average of the three summer months there, falls very much below the average of the same months here. Thus in the agricultural reports of some of the English counties for last year, it was stated that 'frosts were frequent during the months of July and August.' We have been sometimes asked why corn as well as wheat cannot be grown in England. The true reason is found in this low temperature of the summer months; which while it proves not unfavorable for wheat, renders the ripening of corn impossible. Wheat will be best in a temperature that averages from 60 to 70 degrees, as the stalk takes more time to grow, does not suffer from drouth, and gives a finer, heavier berry than is usually produced where the temperature is higher. Great Britain is of course one of the best wheat countries in the world. Corn on the contrary will not arrive at maturity under a less degree of heat than from 70° to 80°, and if the average of the three summer months does not range between 75 and 80, a good crop of corn can hardly be expected. Thus in England corn will never be grown, a law of nature that cannot be broken forbids it.

DICTIONARY
OF
TERMS USED IN AGRICULTURE,
AND IN THE SCIENCES MOST INTIMATELY CONNECTED WITH ITS ADVANCEMENT.

[Continued from page 235.]

Chrysalis. The life of insects is usually divided into three stages, that of *larvæ*, *chrysalis* or pupa, and *perfect insect*. Of the first of these stages, the caterpillar, grub, maggot, &c. afford examples. During this stage they are voracious eaters, and this appears to be the sole object of this period of their existence. In the second, or chrysalis state, the worm usually casts off its exterior covering, and appears in a hard case or shell; in which it generally passes the winter in an immoveable state. The round, smooth case of the chrysalis of the melolontha or May bug, and irregular shaped envelops of the *lepidoptera*, are examples of this state familiar to all. The perfect insects are seen in the flies, butterflies, beetles, &c. and in this state few of them pay much attention to feeding, some indeed never eat at all, the great object of all, being the perpetuation of their species. Some insects spin a covering to the chrysalis; the cocoon of the silk worm being of this kind. Insect life in all its stages affords an interesting and instructive study, and from their influence on the productions of the farm, insects have not as yet received the attention it deserves.

Cider. The expressed and fermented juice of apples. To produce good cider, it is necessary that the fruit should be ripe, that it should be sound, that it should be all of one kind, and that there should be a perfect grinding of the apples. If the apples are not ripe, the saccharine matter necessary to make a good fermented liquor is not developed, rotten apples impart an unpleasant flavor to the liquor, and different kinds of apples afford a liquor that will not ferment equally or perfectly. When the liquor is pressed from the pomace, it should be put in sweet, clean barrels, allowed to ferment, and filled up occasionally that all the feculent matter may escape. It may then be fined by isinglass, or drawn off for bottling. Where making good cider is an object with the farmer, it is usually racked off after the fermentation is closed, and time allowed for all sediment to leave the liquor, into clean new barrels fumigated with sulphur, and will then keep good for a considerable length of time. Cider was formerly used extensively for distillation into apple brandy, but is now but little used for that purpose. According to Brande's analysis of fermented liquors, wines contain from 25 to 10 per cent of alcohol, and cider from 10 to 5 per cent. Cider makes an excellent vinegar, and large quantities are consumed for that purpose. The best cider made in the United States is produced in New Jersey, owing probably to the skill in manufacturing, more than to any peculiar excellence of fruit or singularity of the soil.

Clay. A kind of earth very abundant in soils, and of great use in the arts. The basis of clay is alumine, which is seen very pure in some specimens of the alum of commerce. A leading feature of alumine is its strong affinity for water, it requiring a great degree of heat to effect an entire separation; hence soils in which this material abounds, or those which are clayey, are most usually wet in proportion to the quantity of this earth existing in them. Next to silica, clay is the most abundant of the earths, and is of extensive service to the agriculturist. Indeed, without its presence, vegetation would be scarcely possible, and cultivation could not exist. To the presence of clay we owe the capacity of soils to retain moisture in any degree, since the other earths would leave it so porous, that water would pass through as readily as through a seive. Mixed with lime, clay constitutes marl, of which such use is already made in fertilizing the soil, where these ingredients appear to be wanting. On soils so sandy as to be porous, the application of manures produces only a partial good, it soon sinking beyond the reach of the roots of plants. It is on these that clay may be applied directly with excellent effect. In order to incorporate it with the soil readily, clay should be dug and exposed to the air and frosts, that it may more easily fall to pieces when applied to the soil. Ploughed under in large masses, it not only does no good, but is in the way of cultivation, and fineness is indispensable to its utility. Burning clay is extensively practised in some parts of England for the purpose of farming. This operation destroys its tenacity, and by lessening its affinity for water, renders the soil with which it is mixed more dry and friable, and consequently much better adapted to the production of grain crops. Clay usually contains more or less of the oxide of iron, and to this cause its red color when burned is owing. The more pure kinds are manufactured into ware of various degrees of fineness, pipes, delft, Liverpool, wedgewood and porcelain.

Climate. By this term is to be understood "the character of the weather peculiar to every country, as respects heat and cold, humidity and dryness, fertility, and the alternations of the seasons." Heat or cold do not depend altogether on geographical position; there are a multitude of causes that tend to increase or decrease these, such as oceans, mountains, plains, place on continents, local or general currents of air, and others that will at once present themselves, as influencing climate in these respects. The western side of continents are found warmer than the eastern, a fact accounted for by the general prevalence of westerly winds, which in their passage over oceans are raised in their temperature, while winds that pass over land for the same distance are usually cooled in the same degree. Thus the coast of the United States that borders on the Pacific, is altogether warmer than the eastern or Atlantic coast, the territory at the mouth of the Columbia, which is in the latitude of Mackinaw or Montreal, having the climate, and producing the same vegetables, as Carolina and Georgia. On the different sides of the Atlantic, too, it is found the same difference prevails; places having the latitude of Quebec, in Western Europe producing the grains and plants of Pennsylvania and Maryland. The elevation of any country above the sea has also a decided effect on the climate. Thus under the Equator, in ascending high mountains, the temperature and the climate of widely different regions may be passed in a few miles or hours. The clearing of a country has also a great effect on climate; as forests prevent speedy evaporation, and retain the water that falls on the surface. All other circumstances being equal, a cleared country is warmer than a wooded one. The Cape Verd Islands, by being deprived of their woods, has become more sultry, the springs have mostly dried up, and the health of the inhabitants seriously affected. Is it not probable that many eastern countries, once fertile and filled with inhabitants, have become wastes, if not actual deserts, in consequence of the face of the earth having for centuries been wholly denuded of wood. The great lakes of this country, containing as they do about one-half the fresh water on the globe, and from their great depth only slowly feeling the influence of the atmosphere, whether in cooling or in heating, have perhaps more influence over the climate of the countries bordering upon them, than any other single cause.

AN EXCUSE.

Dr. Knox says "that complaints have been made, that in the present age, marriage is not sufficiently prevalent, or at least that good husbands are not numerous. The men who appear to be insensible to female charms, allege in excuse for their not soliciting some lady in marriage, that such are the expensive manners, dress, and amusements of the fashionable parts of the sex, so little their skill in conducting a family, and such their ignorance of economy, that to be married is often to be ruined in the midst of affluence." Ladies, is this so?—is this excuse valid? If it is, you know it; and you must know the antidote. The happiness of thousands, the welfare of the public morals, the prosperity of our country, depends on a correct decision of these questions. Can it be that so many of the beautiful and the good—the accomplished in every thing, but the one thing so needful for the wife—*domestic economy*—are condemned from this cause to waste their sweetness on the desart air, and pine in single blessedness. That community in which marriage is neglected or disregarded, no matter what may be the reason, is in the high road to ruin; and if our fair ones, by the causes assigned, have frightened our bachelors into hopeless celibacy, there is a fearful responsibility resting upon them. Would it not be well to pause, enquire, reflect.

INSECT DEPREDATORS.

Of the insect tribes there are many that occasionally prey on the vegetables produced by human labor, some making their appearance at one season, or in some particular year, while others are irregular in their visits, and at times disappear for years in succession. Occasionally, too, new depredators make their appearance, or as is most probable, first attract notice by the mischief they produce. Some insects feed only while in the larvæ state, and hence the mischief they occasion is performed while in that stage of their existence. Others spend their larvæ state inactive; but while existing as perfect insects, are most destructive; while a few are injurious in both of these states. Thus it is, the larvæ of the Hessian fly, the cut, grub and army worms, that occasion such loss to the farmer; while the chinch and rose bugs, the grasshopper and locust are injurious only while they live as perfect insects. A knowledge of the history, habits, periods of existence, and depredations, of the most formidable insect depredators is very necessary to all classes of cultivators, and we may be permitted to hope that this desideratum will be supplied by the gentlemen who are now, by authority, engaged in investigating the entomology of some of the principal states.

Few years pass, in which, on the whole, more injury is not sustained from these pests of agriculture, than has occurred in the present. Some districts have, it is true, suffered severely, but the insect visitation has not been general, or unusually destructive where it has occurred. The three principal depredators of the present year have been the Hessian fly, the chinch bug, and the army worm. The first of these has scarcely been noticed, and has produced no injury worth mentioning, except on the tide water districts of the middle and southern states. Here it was very prevalent, and for a time created much alarm. At harvest, however, the damage, though considerable, was found to have been overrated; the very fine weather bringing the crop forward in spite of the fly. It has hardly been mentioned north of the Delaware. The chinch bug is peculiarly a southern pest, very destructive to crops, and its origin, habits and transformations, judging from the little we have been able to find respecting it, does not appear to be at all understood, even in those districts where it is most prevalent. These districts are what may be called the first table lands of the south, or those lying between tide level and the first ranges of highlands. It is described as making its appearance in immense numbers in the woods, from which it spreads in every direction, attacking indiscriminately wheat, corn, and indeed the most of the cultivated grains and grasses. No method as yet has been found effectual to arrest their progress. Though provided with wings, they rarely use them, but march forward on the earth, feeding on whatever attracts them during their progress. Their disappearance is as sudden as their appearance, and apparently equally involved in mystery. An investigation of the habits of this insect is well worthy the study of the southern man of science, as its frequent appearance, and the loss it occasions, render it a formidable enemy to the farmers of the districts in which it most prevails. The army worm is the name given to the larvæ or caterpillar produced by some one of the countless family of the moths, though what one, does not yet appear to have been ascertained. It has received its name from the numbers in which it appears, the seeming order and

regularity of its movements, and its destructive voracity. Wherever it appears, and which ever way the dense masses are directed, vegetation disappears with astonishing celerity. Before, is the garden of Eden; behind is a desolate wilderness. The present season it has done much injury in Illinois, parts of Indiana and Michigan; and a few have appeared west of the Mississippi. A few years since it committed fearful ravages in Ohio. No accurate description of this depredator appears to have been published; and for the purpose of aiding in calling attention to the insect in question, we should be much gratified if some of our subscribers in those districts where it is, or has been most abundant, would furnish us an account of the worm, its appearance, ravages, the miller or moth that produces it, if known, or any other particulars that may be interesting in elucidating its character and history. The only method of checking the march of this insect yet discovered, is to plough a deep furrow across the line of progress, or around the field to be preserved from them, keeping the sides smooth with the hoe, and the worm falling into this furrow, is unable to escape, and perishes. The numbers so destroyed in a single trench, is almost incredible.

Specific Food in Soils for Plants.

That soils the most favorable for the growth of plants of any particular kind, may, unless attention is paid to furnishing a supply of the food in which such plants delight, become exhausted, and unfit for their production, is a fact which an abundance of experiments prove, and which seems to be generally admitted. The earths themselves, the silex, lime and clay, can hardly be said to be the food of plants, though minute portions of all of these are taken up by the vessels, and appropriated to the structure of the firmer portions. The earths only seem to serve as a reservoir for the nutritive matter, or perhaps they rather constitute the fountain of that electro-magnetic agency which has been proved so efficient, if not the sole cause of vegetation.

We reduce plants to their elements by calcination; or we examine the products given by their decomposition, and we only discover the parts that are left; the powers that collected their particles has ceased to operate, and we should be almost as well qualified to judge of what the human body can perform, and the nature of its nutrition and growth, from a post mortem examination, as to decide on these same functions in a living plant from an examination of the remains of a dead one. Chemistry has performed wonders, and from its invaluable aid much more may be expected; but the causes that change the qualities of a soil, and of course the whole character of its vegetation, are of such a nature, and perhaps, apparently so slight or evanescent, as to escape, or be overlooked, in the scrutiny of the most competent observer.

The fact that by continued cultivation or cropping, the soil becomes exhausted of the food of plants, or incapable of producing them is too evident to be denied; that in some cases good growths of one kind of plant may be had, when the previously cultivated one has run out, seems equally certain. The trees of our forests, and the plants cultivated for food, seem equally subject to this law, and the instances that prove this tendency to change abound in every part of our country. In some places where the timber on large tracts of land has been felled, and then allowed to spring up again without intervening cultivation, it is not uncommon to find the young growth of entirely different varieties from those that first occupied the soil; and in some places when the soil has been cultivated for years, and then left to itself, the same results in a total change of timber has ensued. In many places in Western New-York, where the original growth was beech, or even hemlock, we have seen, when this was removed and the soil left to itself, the whole surface covered with cherry laurel, and other trees, not one of which was known to exist near the place.

In Virginia and the states adjoining, it is well known, and the fact has frequently been noticed, that where the original growth is pine, as it is on a very large part of the low country, when this is cleared off the growth of timber that succeeds is never pine but a mixture of the hard woods, principally oak, chestnut and their congeners. On the contrary, where these formed the original growth, the succeeding one is most usually pine, growing up in dense and almost impenetrable thickets. In some of the oldest settled parts of that region this process has been repeated several times on the same lands; the former but most unskilful practice in farming, having been, to crop a piece of land until completely exhausted, then leave it to the recuperative efforts of nature, while new lands were cleared and put under cultivation.

In the valuable papers of Dr. Hildreth on the coal region of the west, and in the notes of a Naturalist, both to be found in Silliman's Journal, are notices of large tracts on which nothing but a heavy growth of white oak and its kindred trees are found, the soil of which is full of pitch pine knots scattered in the greatest profusion, over large districts, on which a pine tree has not been seen since the discovery of the country. The inference is irresistible, that owing to some unexplained cause these immense pine forests have perished, and their place has been occupied by the magnificent oak woods that form so conspicuous a feature of these districts. So plentiful are these pine remains in some places, that the collecting and burning them for tar, has been a profitable business.

That there is the same tendency in cultivated plants to change, or to run out and be succeeded by others, is well known to every one. Continued care is required to keep meadows that lie long in grass, from becoming filled with other and worthless grasses, and reseeding and frequent manurings are necessary to prevent the kinds desired in the soil from running out. So soils on which one crop is too frequently raised will show a tendency to throw it off, in the inferior value of the crop produced. New England and East New York were once the best of wheat growing districts, but have long since ceased to be such; the most momentous question that can be asked by the western farmer, is, will that region which is now so productive exhibit a similar decline. There can be no reason to doubt that it will, unless an improved and more rational mode of farming shall prevent. As illustrating the changes that take place in soils from cultivation, rendering them unfit for plants of a particular kind, we make the following extract from a communication in the Cultivator of April, 1838. It is from the pen of a gentleman of Suffolk County, Long Island:

"With us wheat was raised from the first settling of the county until 1780 or 90; it then failed. About that time we began to get fish (for manuring) which were used for rye, which did well. It was no uncommon thing to have 40 bushels to the acre. For wheat they did not answer, neither did any other manure. Farmers, as a general thing, gave up trying to raise it. At the present time wheat is a far more certain crop than rye, and has been, for years past. Rye has been failing for some time, and latterly many pieces have been cut merely for the straw. There is a complete revolution in the two grains. * * * * Corn has not fluctuated; it has been a steady crop, and governed by the seasons. Oats—the same. Flax has run nearly the same round as wheat and barley."

Two causes have by vegetable physiologists, been assigned for this action of plants on the soil, both of which have been advocated with great skill, and in favor of both of which a great array of facts and experiments may be adduced. One of these theories supposes that a specific food for each kind of plant exists in greater or less quantities in the soil, and that when this food is exhausted by a succession of crops of the same kind, the plant must of necessity fail for want of its proper nourishment. In this way the changes of forest timber noted above may be explained, since rendering the soil unfit for the production of one kind of plant, by no means disqualifies it for growing another. By this theory also the cause of the changes of the grain crops in our country is made plain; as when the specific food of each plant being in a great degree different, that required by the rye had been untouched by the wheat, and vice versa. The second theory by which these facts are accounted for, is that of the justly celebrated De Candolle, which supposes that plants, in growing, secrete substances injurious to, and not required by the plants, and these substances, strictly excrementitious, are thrown off by the roots into the soil, and by repetitions of the process, must render the soil unfit for the growth of the plant. This excrementitious matter is, however, supposed to affect no plants except those of the same kind with that from which it has been ejected; thus that from the pine could not prevent the growth of the oak; or that which rendered the soil unfit for wheat, injure in the least a crop of rye.

It is clear that most of the phenomena alluded to above, as attending a succession of crops from the same soil, or the changes which the forests of a country undergo, may be explained by either of these theories; and it is not improbable that both may be more or less influential at the same time. To us the weight of testimony has appeared to be in favor of the theory, that attributes these changes to an exhaustion of the specific food of the plant, rather than to the excretion of poisonous matter from the preceding plant. It must be admitted, however, that the experiments of DeCandolle, and Macaire, go far to prove such an exudation or secretion from plants, and this fact once established, it cannot be unreasonable to suppose that the matter thus rejected, must be unsuitable for the succeeding plant, should that be one requiring the same kind of nutriment.

Thus, admitting the truth of either of the theories, or of both, we arrive at the conclusion that change of plants is a law of nature; and the manner in which we can imitate her, and thus avoid the inevitable consequences of continued successions of the same kind of plant, is distinctly pointed out. Nature restores the original constituents of the soil by a slow and gradual process; science has enabled us to greatly abridge this period, by avoiding ourselves in rapid succession of the same changes, that nature unassisted, would require half a century to perform. We do this in two ways,—by either restoring to the soil in the form of manures what we have taken from it in the shape of grain or grass; or, by such a rotation of crops as shall prevent the exhaustion of the specific food of the plant, in one case, or the injurious accumulation of excrementitious matter, in the other. The successful combination of both these methods, manuring and rotation, constitutes the great secret of succesful agriculture; and the establishment of the principles on which the system is based, may be considered the greatest improvement of its age. In those parts of our own country, and in Europe, where the system of manuring and rotation has been fully adopted, a steady improvement in the soil and in the crops is clearly apparent; and not the least symptom of the effects of exhaustion, or of exudation can be traced. It is time that the unphilosophical system of taking crop after crop of the same kind from land, should be abandoned for the more rational one pointed out by nature herself; and which has been proved to be so far superior to the former methods. Corn, wheat, clover, and manure, the last applied to the first crop, has trebled the produce of the lands in Dutchess, or on Long Island, within 30 years; and lands that had been exhausted and abandoned have been reclaimed, and restored to a state of fertility rivalling the best districts of the West. There is great reason to fear that this subject is not yet properly appreciated by our farmers. We, in the comparatively new parts of our country, go on as though exhaustion was impossible, or reducing the fertility of our lands a mere fiction. Do we not already begin to perceive proofs, (and particularly where the skinning process in cropping is adopted,) that these causes have already begun to operate? Do we get as much wheat per acre on such lands as we did 20 years since?—if not, to what cause shall we attribute the falling off. One of the most important questions a farmer can ask himself, is, how shall this reduction of crops be arrested where already commenced, or the commencement prevented, where it does not exist.

COMMUNICATIONS.

the Morus Multicaulis.

Indian Key, Tropical Florida, July 4th, 1839.

Mr. Tucker—Among the odd numbers of your periodical, received here via Key West, I find No. 22 of June 1st, with an Editorial article, headed "Prospects of the Multicaulis growers," in which you give the calculations of Judge Comstock to prove that "the market *cannot be overstocked, nor the price reduced* by the increase of the next crop of the Morus Multicaulis; while you contend that the *prices must fall* in exact proportion to the multiplication of these trees; yet that the increase will not be so great *for several years* as to reduce them to their simple value for feeding worms.

I will first examine the assertion of Judge Comstock, that the three and a half millions of trees on hand last spring, can be multiplied only to 35 millions next fall; secondly, that this large number will not be enough to supply the little State of Connecticut. Although he undoubtedly does "understand the subject in all its bearings," yet in making "ten the ratio of increase," as "surely large enough", he is opposed by the equally intelligent Editor of the Farmer's Register, who makes *thirty-one* the least ratio of multiplication,—which would make the number next fall, equal to 108 millions, 500 thousand trees. In Tropical Florida, the least proportion would be *fifty to one*, per annum. But admitting only 35 millions of Morus Multicaulis next fall, will they be not enough to supply the little State of Connecticut? At one thousand trees per acre, there would be enough to stock thirty-five thousand acres. Take the least estimate of the Silk Convention for the produce of raw silk per acre, at fifty-one pounds; and the total produce would be one million, seven hundred and eighty-five thousand pounds! Take also the lowest price calculated by that Convention, at five dollars the pound, and we shall have a total value of $8,925,000 of raw silk. Estimating its value when converted into manufactures, at only double that price, and we ascend to the amount of $17,850,000 of Silk Manufactures per year. But the average amount of our annual importations of silk and silk manufactures, has not exceeded 14 or 15 millions of dollars a year! Does the little State of Connecticut expect to do more than supply the whole United States?

Now, Mr. Editor, as *your* anticipations are more reasonable, let *us* reason together. We agree on the fact, that the prices of these trees must decrease in proportion to their increase; but *I* differ greatly from *your* opinion, that it will *require several years* to reduce their prices to their simple value for feeding worms. 1st. Every nerve will be strained this summer to multiply these trees to the greatest possible extent, and hence it is reasonable to admit that they will be multiplied in the lowest rate as given by Edmund Ruffin; but we will strike off 8 1-2 millions, and take the round numbers of 100 millions of trees next fall in the U. S. By the same calculations made above, these will stock 100,000 acres of land and yield 5,100,000 pounds of raw silks worth 25,500,000 dollars! and when converted into silk manufactures, worth, at the very least, $51,000,000! We shall then have in November of 1839, the grand desideratum of an ample number of the Morus Multicaulis, to yield sufficient silk, not only for domestic purposes, but for foreign export! And what will then be the intrinsic value of the Manilla Mulberry as *food* for silk *worms* to convert into *Silk!* I answer, precisely the same value which it will possess as *fodder* for Milch *Cows* to convert into *Milk.* If the green leaves on the trees, should be worth 25 cents per 100 lbs. for *fodder for cows*, they will be worth the same for *food for worms:* and if the green leaves delivered at the stable should be worth 50 cents per 100 lbs., they will be worth nearly that price when delivered at the cocoonery. But will the people of the United States still assume to be deluded next fall by exaggerated calculations of the exorbitant *profits* of bonafide Silk Culture? I think not. Many persons will raise small quantities of silk worms this summer, and thus experimentally demonstrate the fallacy of all the romantic estimates presented by speculators in the sale of the trees. They will then not merely deride the *Munchausen* calculations of 1,296 lbs. of Silk to the acre! they will laugh at the graver *average* estimate of 333 lbs. to the acre; and they will even begin to doubt the "*certainly not too high*" average of the Silk Convention which is fixed at 51 lbs. per acre! For my own part, I am not willing to admit that the average produce will exceed 25 lbs. per acre, with ordinary management on ordinary soils!

The bonafide Silk Culturist will further find, that he cannot safely calculate on receiving a higher price than three dollars a pound for the reeled Silk he may produce with ordinary *luck*, and ordinary management; and he will still further find that the Silk Convention has not in the least exaggerated the cost of the *mere labor* to produce it, when they find it at $2,50 cts. the pound, which will leave him 50 cts. for the value of 200 lbs. of leaves requisite to produce 1 lb. of reeled Silk. He will then see that the natural benefits to be derived from the combined propagation of the Mulberry and raising of the Silk worm, do not depend on the false hypothesis that the production of Silk will yield *greater profits* than the culture of corn or of cotton. He will then further reflect, that the great national advantages to be derived from this new branch of industry will result from the facts, that *it can be best pursued* on those poor soils and by those feeble persons that cannot be profitably devoted to the production of corn or of cotton, or of any other actual staple of Agriculture! In our Northern States at least, it can only be a *collateral branch* of farming and the *raising of poultry*. In the language of the Committee for the extension of the Culture of Silk in Bavaria, "the culture of Silk must be an *incidental* business, the *secondary* task of servants, children, and old people. Encouraged by the examples of Greece, Italy and France, we wish to trust it to the fair hands of ladies, who could, by way of amusement, and without any expense obtain, within six weeks a more elegant material for the ornament of their persons and their apartments."

Hence I repeat again, the great national advantages of the Silk culture, will result from the facts that it can best be pursued by poor and feeble people on a small surface of the cheapest and most sterile soils; that a few acres of the poorest soils, planted with Mulberry trees by the poorest man, will yield leaves enough to be fed unto worms and reeled into Silk, by the feeble in health, sex or age, of his own family, however large, and that it will hence combine the merits of creating a dense population of small cultivators, and of family manufacturers on our hitherto worthless soils. Very respectfully, your obedient servant, Henry Perrine.

Mr. Tucker—In the Notice of the "Geological Reports," in the Farmer for July, there is a remark which needs some qualification. A censure is passed upon Prof. Torrey, and Dr. DeKay, as botanist, and zoologist, because they had made no report, yet, the language of Gov. Seward implies no censure, but is merely a statement of a fact. For that fact, as justifying it, the Governor proceeds to say, that the Legislature, from the communication before made to them, "will perceive that it is supposed that from the nature of the duties,—reports cannot be made until their labors are brought to a close" in Botany and Zoology. Those subjects are great and difficult, and require much time for the collection of materials for such a report as is expected. Dr. Torrey has been laboring for years and has accumulated a great amount of matter, and has just visited this part of the State, again for this purpose. It needs to be given in a regular and systematic form, and there can be no doubt in the mind of any one who understands the subject, that no partial report could be satisfactory to the people, or the Legislature, or present the more show of adequate attention to the matter. Similar remarks may be made in relation to the department of Zoology. The compensation will not be extravagant pay for the work which these naturalists design to give to the State. The feelings of one of those gentlemen, are injured by the uncalled for censure, and by his friend so much is offered for his exculpation.

C. D.

THE WHEAT MONOPOLY.

Mr. Tucker—A few weeks since you gave place to a few remarks on the subject of *beef*, and I have now to ask a small space for the discussion of a kindred subject, the *price of Flour.* That there has been a vast deal of twattle on this matter, none can dispute. Men who know nothing of the question except what they derive from the mastication of a baker's loaf, who could not tell wheat from barley, and are better acquainted with the selling of tape or stitching of buckram, than the production of bread for a nation, have filled the city papers with their cries of monopoly, and as in the case of beef, are calling lustily on us farmers to nip the bud of our prosperity, by uniting with them to crush one of the most useful classes in community—the Millers.

If the Millers have done wrong, they will be punished, most assuredly; if they have erred in judgment, they must suffer the consequences; but for us to exult in the misfortunes or assist to destroy a class of individuals so necessary to our prosperity, would be truly suicidal.

What the drover is to the cattle grower, the miller is to the wheat grower. They are the carriers, the go betweens. The cit cannot leave his shop or the manufacturer his spindles, to come to the farmer for his beef or his wheat; the farmer cannot leave his farming operations to drive a yoke of cattle from Ohio, or carry a load of grain from Genesee or Onondaga to New York. In the one case, the drover, in the other the miller assumes the labor of transportation to the manifest advantage of both producer and consumer. It is true these go-betweens must be paid for their services, and it is right they should be; the farmer who grows the cattle or the wheat can afford it, for driving cattle or riding wheat is poor business for the man who has a good farm to labor upon; and the merchant or manufacturer must be in a poor way indeed, who could leave his business to go to the country to purchase his year's supply of meat or bread.

As to the cry of monopoly that has been raised, it is absurd and unjust. Our agricultural products amount to more than five hundred millions of dollars, and of this the grain part exceeds three hundred millions. To talk of a few dozen millers monopolizing this immense amount of grain is ridiculous. There is no necessity for supposing any such monopoly in order to account for the high price of flour. In my paper on beef, I showed that there was sufficient reasons why beef was high and dear, without supposing any combination, and it is equally plain why flour has been high, but has now fallen without calling in the aid of monopoly.

The amount of wheat annually grown in the United States does not greatly exceed the consumption; consequently there is usually very little surplus remaining over the year, and any considerable falling off in the crop will be immediately felt in an increase of price in the article of flour. The crops of the years 1836 and '37 were comparatively light, and the stock in the country had become exhausted. This was evident from the large importations in the latter year. The harvest of last year, 1838, was better, but as we all know, could not leave any considerable surplus over the consumption of the year. The price of this surplus, or what was remaining in the country on the first of July, it is evident must entirely depend on the appearance of the present crop. If the crop did not exceed that of previous years, wheat would command the price it had previously done, and the purchase of wheat at fourteen shillings would have been safe. If the crop exceeded by one half or one third that of previous years, then there must be a corresponding diminution in price. It is to be presumed that the millers based their calculations in

the purchase of grain on these well known facts; the crop promises to exceed the expectations of every one, and a decline of prices is inevitable. This decline must have taken place had there not been a flouring mill in the State; millers have not added to the surplus, neither have they increased the crop of 1839. They made their calculations, and their purchases on an annual average crop, and they were justified in so doing; a kind Providence, or in the language of law, an act of God has given us a most bountiful crop, and they must in consequence lose on their purchases.

The prices of wheat and meat are governed by precisely the same law; that of supply and demand; though from the nature of the case the prices of meat require longer periods to run their course of fluctuation than does that of grain. A single crop of grain is sufficient to change the whole order of prices; to raise or depress; though experience proves that high prices in flour are usually the result of several years partial failure of the crop, while a single abundant one, is sufficient to reduce them. The number of the cattle and sheep in the country cannot fluctuate in this way, or with such rapidity; and hence the prices of meat are more firm. Let 100,000 head of beef cattle be thrown into the market unexpectedly, and beef would fall as quickly as wheat has done; but it will take years to grow the cattle, while twelve months has given us this extra supply of grain.

Abuses of power can never be justified. If the banks have exceeded their proper limits, or gone out of their proper business in any way, they will eventually be the losers. They are the creation of the people's will; and will exist no longer than they retain the confidence of those who instituted them. That banks by granting business facilities to the miller, have benefitted the farmer cannot be doubted. It is the interest of the farmer to sell his grain as soon as he can get it to market; and in leaving a proper proportion of their funds to the miller, they are essentially aiding the farmer in disposing of his crop. While, therefore, the farmer should shun all direct connection with banks, and never allow his name to be found within their doors, he has no inducement to join in the hue and cry against them, so long as they confine themselves to the legitimate objects for which they were instituted. If the banker and the miller are willing to aid us in getting our crops to market, we shall willingly accept the aid; if they go further and attempt monopoly, they will find, and it is spoken reverently, they are contending with God.

One remark more, and I have done. The events of the last few months have impressed me more than ever, with the imperative necessity of providing for the education of the people, not such an education as is usually considered sufficient, but one which will give them some knowledge of men and things. A people that understood the first principles of political economy, the laws that govern the principles of supply, that were familiar with the actual state of the country, and its population could never have been brought to such absurd conclusions on the subject of meat and flour; as the discussions on these topics in our city journals prove exist. They could only have been the result of the most narrow and limited views, or intended for the basest of purposes. If bread and meat exist in the country, such are the facilities of communication, that it will assuredly find its way to the points where it is most wanted, or in other words where the best prices are paid for it; nor can any earthly power prevent it. Banks, and millers, and drovers, are but the instruments of transfer; the cattle, the wheat, and the corn, have an existence, and a price independent of them, and one which they can only modify, not create, or govern. If there is any class of men who should fully understand their own interests, it should be that of the farmer. They must be superior to cajolement and flattery on the one hand, and denunciations and menaces on the other. The necessity of understanding their power and their rights, and of temperately, yet firmly maintaining them, is becoming daily more obvious. Let us look to it. PLOUGH POINT.

Worms on Cherry Trees.

MR. TUCKER—There is a small worm, about a quarter of an inch in length, resembling the snail not a little, (excepting that its color is much darker,) which has been making dread havoc with our cherry trees. Many valuable trees in this place are completely destroyed, and others have the appearance of rapid decay.

About three weeks since, Mr. "L. A. M." discovered them on mine, of the same kind—after a few unsuccessful experiments to destroy them, I came reluctantly to the conclusion, that there was no remedy, and that I must lose my trees. You can hardly imagine my surprise, when about ten days after I first discovered them, nearly, or quite all had disappeared! I have just dropped my pen to examine them—you have the result; after diligent search, I cannot perceive that there is one remaining, on any of the trees! The leaves are much eaten, but I am induced to believe the trees are not materially injured. The query is, what should have caused their disappearance in so short a time, or even at all, as no means of any kind were used to remove them from the leaves or trees.

I should like to know *their origin*, and something of *their end*. Cannot you, or some of your correspondents, give me through the medium of the Farmer, the desired information? and also, what *means* would effectually destroy them, without injury to the trees—and above all, what could have caused their abrupt disappearance from my trees. LUDLOWVILLE.

August 1st, 1839.

Morus Multicaulis in Illinois.

MR. TUCKER—Being a subscriber to your valuable paper, and having noticed the failure of the Mulberry Trees, in many sections of the eastern country, I take the liberty of sending you a statement of the prosperous growth of my trees, in this place. I finished putting them out on the 30th day of April last, and from the roots planted at that time, I have at this date, a growth of six feet and three inches, and have exhibited to our citizens, leaves measuring thirteen and ½ inches in breadth, and sixteen inches in length, which I believe is the largest that we have any account of being grown in this country. I have also trees grown from the bud, to the height of four feet nine inches, with leaves nearly as large, and think if the balance of the season is favorable, I shall succeed in getting a growth of ten feet from the root. Respectfully yours, C. L. WHITNEY.

Chester, Southern Co. Illinois, July 24, 1839.

Heaves in Horses.

MR. TUCKER—In answer to the inquiry of your correspondent, I would briefly say—that if his horse is not more than 5 or 6 years old, *possibly*, he may recover, by letting him run at large during the winter, for two or three seasons in succession, if necessary, being careful not to give him but little hay, particularly clover, and none at all, if musty. I am some in doubt whether or not his horse has the heaves, if occasioned as he says, by ill treatment—if by ill treatment, I understand him to mean, "hard work, and fast driving." If he means, that he fed him musty oats and hay, "I guess he has got it." The heaves in horses I believe to be a disease of the lungs, and like the consumption in man, when it takes fast hold, we may seek in vain for a cure. LANSING.

August 3 1839.

Cultivating Fruit Trees.

Instruction in the culture of fruit trees, forms part of the education of the ordinary seminaries in the States of Mecklenburgh Schwerin. No schoolmaster is admitted to exercise that function without a certificate of his capacitity to teach the management of fruit trees. The same masters are obliged to take care of fruit gardens; and those who, previously to the promulgation of the law on the subject, were ignorant of the art, receive the due instruction at the expense of the school fund.—*Bull. Univ.*

From the Cultivator.

Whitington New White Wheat.

Mr. J. BUEL—Dear Sir—In the month of March last, I received from my brother Geo. C. Thorburn, two bushels Whitington New White Spring Wheat; from the high recommendation the wheat received at the Liverpool Agricultural Society of England, and its fine appearance, (a large white plump grain,) I was induced to recommend it to our farmers, and would not sell over two to four quarts to any one person, (except in a few instances,) in order to give this wheat a wide circulation through our country. I have reason to fear, it is a *winter wheat*. From the circulars sent from England *with the wheat*, I sold it in *good faith* as a *spring grain;* I never gave it any other recommendation than its appearance, and the testimony of the grain in England. In the April or May number of the Cultivator you made an extract of the qualities of the wheat from an English work, and from your notice of it, I received orders from all parts of our country, for a few quarts of the wheat. No one regrets the disappointment more than myself, and I here disclaim any intention of practising a deception on the public, and am willing to render every satisfaction in my power. Respectfully yours, &c. W. THORBURN.

BY THE CONDUCTOR.

In the December number of the London Farmer's Magazine, we saw advertised, "*the Whitington New White Wheat*, for winter or *spring* sowing, which obtained a medal at the Liverpool Agricultural Meeting in 1836." We received a sample of the most handsome wheat we ever saw, which purported to be the Whitington; in consequence of which, and of its being represented to be a spring wheat, we sowed one bushel, early in April. But it evidently is a winter grain; as only an occasional plant shows an indication of producing seed at this time, July 15. We are satisfied that the Messrs. Thorburns, as well as ourselves, have been imposed upon, by the foreign advertisements and circulars which accompanied the wheat from London. We purpose to mow ours, in the hope of getting a crop from it in 1840.

From the New England Farmer.

Suckering Indian Corn.

The question is repeatedly proposed, is it best to sucker our corn? We believe as a general rule that no growing plant can be muliated or stripped of its crown, its limbs, or its leaves, without injury; or at least that it cannot be safely done before the seed is completely formed. There are exceptions to this at least of a qualified nature, as where a melon vine is stopped or a grape vine girdled with a view of forwarding the ripening of the fruit. The suckers of corn are of course not so important to the plant as the stalks; and the fodder obtained by removing them will be some equivalent for the labor expended in the operation. But upon the whole we hesitate in advising to it. We once suckered a large field. The growth was most extraordinarily luxuriant and heavy; and a great deal of the corn was broken down by the process. We did not accurately measure the crop, which some accidental circumstances prevented our doing; but as well as we could judge, the amount of produce was not increased, and the whole field was materially injured. We know a careful farmer in Middlesex county, who operating on a small scale and with his own hands, in a case too where the field is so small that he finds no difficulty in carrying out his suckers, who believes that he has derived some small advantage from it. The Rev. Dr. Lyman, of Hatfield, gave to the Massachusetts Society an account of an experiment performed by him, of suckering a considerable field some years since. We have not seen the account for a long time; but as well as we can remember, he regarded the increase of the produce or the saving of the fodder from the suckers as not a compensation for the trouble and the injury to the corn. The fodder from the suckers is not lost if left standing until the whole is gathered. The judgment of Lorain, whose authority in all matters pertaining to agriuulture will not be questioned, is against suckering corn, or cutting the stalks until the crop is fully ripened.

In the Southern States the leaves of Indian corn are stripped off for the winter fodder of their horses, and as their only practicable substitute for hay. We wish some intelligent southern cultivator, as our respected friend Ruffin, of the Farmer's Register, if this should meet his eye, or the intelligent editor of the Southern Agriculturist, would give us their views on this subject and inform us of any satisfactory experiments which may have been made to test the advantages or the injury of the practice. If opportunity presents, we shall advert to the matter of topping stalks and gathering the crop hereafter; old matters indeed, and on which we have nothing novel to recommend, but in respect to which it may be useful to call to recollection some decisive and instructive experiments which have been made. H. C.

Cocooneries in the United States.

We have been repeatedly called on for information as to what is really doing in the silk business in the United States. The following statement will probably be satisfactory to the public, and may possibly serve to quiet the nervous excitement of certain persons and presses, in relation to the 'morus multicaulis speculation.' We only regret we could not obtain a complete list. We sincerely believe there are five times as many cocooneries in the country as we have enumerated; but even the present list will serve to shew, that the morus multicaulis trade is no 'humbug,' and that the silk business is an object worthy of national regard, rather than a fit subject for sneers and jests.

The cocoonery and silk factory of the society at Economy, Beaver county, Penn. under the management of Mr. Rapp, is entitled to the credit of being first on the list. It is a pioneer establishment. In 1832, they had progressed so far as to manufacture silk vesting of beautiful and excellent quality, silk handkerchiefs, and various other kinds of goods. The writer of this was honored with the presentation of a vest and handkerchief of their manufacture, in 1832. At the present time they are manufacturing all kinds of silk goods, and we have now before us, eight specimens of satin, lustring, figured vesting, of three patterns, gros de naps, &c. &c., all from cocoons of their own raising.

Mr. Cobb's cocoonery, at Dedham, Massachsetts, is probably next to that at Economy, in age and extent. Mr. Whitmarsh's, at Northampton, and another belonging to a company, at the same place, are believed to be the most extensive in New-England. Mr. Timothy Smith has a cocoonery at Amherst, Massachusetts, and has made silk extensively and profitably for five or six years.

There are several pretty extensive cocooneries at and in the neighborhood of Hartford, and in other parts of Connecticut.

Messrs. Prince, at Flushing, N. Y. have erected an extensive cocoonery, and were feeding, when we last heard from them, about 1,000,000 of worms. There are several other establishments on Long Island, at Poughkeepsie, and other places in that state, from which we have no particulars.

The Messrs. Cheney, and Mr. Gummere, of Burlington, New-Jersey, have extensive cocooneries, as also have Mr. Samuel Hazlehurst, and Mr. Joseph White, of Mount Holly, and Messrs. Jones & Yorke, of Salem, in the same state.

In Pennsylvania, Mr. Physick's cocoonery, at Germantown, is first on the list in extent. Mr. Maupay, at the Rising Sun, has a cocoonery adapted to feed a million of worms. Mr. Lloyd, and Messrs. Janney & Leedom, in or near Philadelphia, and various other individuals and companies in the vicinty, have commenced raising worms. At Doylestown, Messrs. J. H. Anderson, S. Dubois, D. Byrnes, M Opp, Mr. Burgess, and Capt. Donnalson, are all engaged in raising silk worms.

At Lancaster, Messrs. R. & H. Carson have made great progress. They have not only an extensive cocoonery, but they reel and manufacture their silk. We have seen some handkerchiefs made by them of very superior quality, and have some sewing silk now before us, of unequalled beauty. The Rock Hill cocoonery, at the same place, owned by Mr. S. C. Humes, is intended to accommodate a million of worms; 100,000 were fed there the present season. Near Bristol, Penn. Mr. James Swain is erecting a cocoonery, calculated to accommodate 1,000,000 of worms.

There are several cocooneries also at Beaver city, Beaver county, Penn. and numerous others in the state, but of which we have no particulars.

In Delaware, there is a silk company at Wilmington, which has recently erected a large cocoonery, a few miles from the city. They fed from 4 to 500,000 worms the present season, on the white and native mulberry, which have spun cocoons without the loss of any portion from disease. Another company, in Wilmington, have fed 150,000 worms the present season; another, belonging to Mr. Ziba Ferris, in the same place, has been very successful this season. Doctors Gibbons, Samuel Wollaston, and several others, have cocooneries in or near Wilmington. In Smyrna, Del., Mr. Benson has a cocoonery of considerable extent, and various other individuals and companies in different parts of the state.

In Maryland, there are numerous silk companies and private cocooneries in opreation. On the eastern shore there eight or ten incorporated companies, but we have no particulars as to the extent of their operations.—The oldest cocoonery in the state, is probably that of Messrs. Jenks and Ramsburg, of Frederick, who have the present season, fed about half a million of worms, with success. In and near Baltimore we have the Maryland Silk Company, with an extensive cocoonery, and a factory house for working up the cocoons; the old Central race course has been purchased by Rev. Luther J. Cox, who is erecting an extensive cocoonery there, and has already raised a large number of silk worms. Numerous individuals in Baltimore have fed large numbers of worms the present season, among whom we may mention, Mr. Center, proprietor of the silk agency, in Baltimore street, Mr. French, of South street, Mr, Walker, and others. The Centreville Silk Company is one of the oldest in the state, but we have no particulars as to its operations. Besides individuals and companies engaged in the silk business, we find this branch of industry has been introduced into the alms houses of eight counties of the state, and authority given them by the legislature to raise small sums of money to accomplish the object.

In the District of Columbia there are several cocooneries in progress, but we have the particulars of only that of John Mason, Jr. Esq. of Georgetown. He has erected a large cocoonery, well adapted to accommodate from three to five millions in the course of the season. He also *begun right*, having provided himself with a full supply of mulberry leaves before he hatched his worms. We anticipate a handsome report from his establisment.

In Virginia they are going on bravely. There are two or three large cocooneries near Fredericksburg.—The Potomac Silk and Agricultural Company has a large cocoonery, that will accomodate one or two millions of worms, and seventeen acres of mulberry orchard. Another belonging to W. K. Smith & Co., of at least equal extent, and, as we are informed, several others.—Near Richmond, we have the cocoonery of Custis Carter, Esq. that will accommodate two or three millions of worms, in the course of the season; and that of Mr. Pleasants, at Bellona Arsenal, of still greater extent.—Both of these establishments have raised considerable quantities of cocoons the present season, and are now in the full tide of successful experiment. At Petersburg, Va. several very satisfactory experiments have been made, and among them that of Mr. Ruffin, a detail of which was commenced in our last, and is concluded in our present number. There are, doubtless, ten times as many in the Old Dominion as we have referred to, but we have not the particulars; it will be obvious to the reader, that we are writing off-hand, and by no means making out a statistical document. We must not omit to mention the contemplated establishment of Morris Pollok, Esq. the proprietor of a silk factory near Glasgow, in Scotland, who has recently determined to establish a cocoonery near Danville in Pittsylvania county, in which he expects to produce $150,000 worth of raw silk annually, to supply his home establishment. His superintendent and operatives have already arrived.

In North Carolina there are several cocooneries, of greater or less extent,—among others, that of the Rev. Sidney Weller, of Brinkleyville, Hallifax county, one or two near Raleigh, one near Salisbury, &c. &c.

In Georgia, there are several companies and individual establishments; among others, those of Messrs. Cheney & Hutchinson, Messrs. Plant & Millin, and Dr. Osborne & Mr. J. Sibley, near Augusta, are most prominent. It is mentioned, that so fully satisfied have several individuals of Augusta and its neighborhood become, of the ultimate success of the enterprise, that they have embarked in the business with similar feelings to those which actuate a planter, who purchases land and slaves for the purpose of raising cotton.

It will be observed, that we have not crossed the mountains in the grand tour sketched above—except in a brief trip to see our old friend, Rapp, at Economy.—Indeed we have skipped over the Atlantic states with such rapidity that we have only been able to catch a glance here and there of what is really doing in the silk business. Yet even in this very cursory view what a number of enterprising people, what an immense amount of capital have we not discovered employed in the legitimate silk business? Enough of both we should imagine to induce our newspaper press to treat them with common respect, if not with their countenance and support. We have seen enough of both, we imagine, to convince all thinking men, that there are too many respectable men, and too much capital engaged in the business to permit it being made much longer the subject of gibes and jeers.

In connection with this subject, and as illustrative of the sagacity of some people, we will recall to the memories of our elder brethren of the press, the circumstances that attended the introduction of the culture of cotton, and subsequently of cotton factories into this country. The opposition to the cotton culture was a thousand fold more fierce than any we now experience in the silk culture. Ridicule and satire, then as now, were the weapons of warfare; and then as now, the old 'South Sea bubble' and the Holland 'tulip mani,' were the convenient texts from which they preached their admonitary sermons. But the cotton culture succeeded in spite of them; and cotton factories sprung up in the very face of all opposition; cotton has become the international medium of exchange, and our cotton fabrics clothe the backs of half the world! And where now are the old opponents, the ridiculers and satirists of the cotton culture? They are where the present opponents of the silk culture will be before ten years shall have passed—NO WHERE.

G. B. S.

To Correct Damaged Grain.

Musty grain, totally unfit for use, and which can scarcely be ground, may, it is said, be rendered perfectly sweet and sound by immersing it in boiling water and letting it remain till the water becomes cold. The quantity of water must be double to that of grain to be purified. The musty quality rarely penetrates through the husk or bran of the wheat. In the hot water, all the decayed or rotten grain swims upon the surface, so that the remaining wheat is effectually cleansed from all impurities, without any material loss. It is afterwards to be dried, stirring occasionally, on the kiln.—*New England Farmer.*

Stirring the Earth a relief against Drouth,

Is the title of a very excellent article published by the Hon. John Lowell, in the Massachusetts Aagricultural Repository, from which you will find an extract in the text-book I first put into your hands—Fessenden's Complete Farmer. In a very dry season, such as we had in 1838, he had some early potatoes in a very sandy soil which seemed so feeble that they were on the point of withering daily. All hopes of a crop were abandoned; and therefore he thought them the subject of what he then supposed a *desperate* experiment. He ploughed them thoroughly, and in three days, without a drop of rain, they were observed to have changed color, and to have started up as fresh as if they had received the benefit of ample showers. A recollection of this experiment led us in the dry summer of '38, to compensate to our hoed crops for the want of showers, by keeping the earth well stirred and pulverised round them; and we are confident that our operations in this way were beneficial.

This need no longer be considered a *desperate* experiment, for science enables us to explain in what manner the benefit is produced, and might have indicated it as a proper course even before it had been tested by trial. In a time of drought take a piece of earth and pulverise the surface of one half of it, allowing the other half to remain in its hardened and baked condition. For several mornings afterwards observe upon which of these pieces the dew seems to remain the longest, or to have been inbibed the most. The piece which has been stirred will so evidently be seen to be the moistest that no doubt can be entertained of your having gained some moisture for the soil in this way. Now it is universally or very generally admitted that the dews abound in the food of plants, and this being so, by stirring the soil around plants you furnish this nutriment to the roots by making the soil light and porous which conveys moisture more readily than a hard, baked soil. The air also is supposed to contain the food of plants in a gaseous or very readily-appropriated state. If this is so, and we have no reason to doubt, then it is easy to see that a light and porous soil is more permeable to the air and to whatever food it contains than a hardened soil can be. This consideration shows that stirring the earth may be beneficial not only in seasons of drought, but also at all times. And in confirmation of this we recollect that it has been recorded of Curven, an English agriculturist, that by continually stirring the soil around some field cabbages, he obtained them of the enormous weight of 50 lbs.

Mr. Lowell suggests another mode by which plants may be benefitted in a dry season, by stirring the surface, and keeping the soil light and porous. It is well known that porous bodies are bad conductors of heat. If you take a piece of woollen cloth or a little wool, and a piece of slate or metal, and place them upon a piece of lard or butter exposed to the rays of the sun, you will in a few minutes be convinced of the difference there is, as conductors of heat, between porous and compact bodies. Now it is reasonable to infer from our knowledge of this law, that earth in a hard and compact state must convey heat much deeper than soil that is loose and porous. And it is stated in confirmation of this, that compact earth will become very hot, while a light garden loam well stirred, will remain cool, at two inches under the surface, at noon of a sunshine day.—Stirring the earth, therefore, not only allows more moisture and more food to be imbibed from the air and dews of night, but it also enables it to resist the hact of the sun's rays.—*Farmer's Monthly Visitor.*

Heavy Fleeces.

Ward M. Lincoln, of Brandon, has sheared 24 pounds of wool from two sheep, this season—it being only one year's growth. He also sheared 11 pounds from another; and from another still, 10½.—*Vt. Telegraph.*

From the New England Farmer.

Profits of Farming.

Much discussion and conversation have been had upon this subject. We do not mean to enter fully or much at large upon a subject which requires to be examined in various aspects and relations, in order that an enlightened and well founded judgment may be made up; and especially in order that we may not lead to any false inferences of its unprofitableness, nor encourage any fallacious expectations as to any advantages, (we mean pecuniary advantages,) to be derived from it. The erroneous opinions and calculations which have been formed in this matter, have led to most painful results, to serious losses, and to bitter and vexatious disappointments. We know a gentleman who tried farming on an extensive and experimental scale, whose authority is often quoted as asserting that "in agriculture two and two do not make four." We understand it to be implied in this, that calculations respecting the profitable results of agriculture, or a fair return for the expenditure of labor and the investment of capital, are not likely to be verified as in the other business pursuits of life. We do not admit the axiom in any fair sense. We do not believe that it does justice to agriculture; and no small experience and some observation satisfy us, that circumstances being equal, farming would furnish as fair a compensation for labor, and as ample a dividend upon the capital invested, as the common trades which men engage in, and even the pursuits of mercantile and commercial life. Of course we except all extraordinary cases of good fortune, and all matters of gambling and speculation.

The returns of most crops strike one sometimes with astonishment; and would, if taken as a test, lead to the most delusive expectations. A grain of seed sometimes returns one hundred fold; and this being sown a second year, would perhaps give ten thousand fold, and so on in a geometrical ratio. Twenty bushels of potatoes planted will frequently yield four hundred bushels, that is twenty for one. A bushel of wheat sown oftentimes returns thirty bushels. A peck of Indian corn planted will often produce sixty bushels, that is two hundred and forty for one. A pound of carrot seed or of ruta baga, which costs a dollar, will produce six or nine hundred bushels of roots worth one hundred dollars. The proceeds in this case seem enormous and yet they are constantly realized, and often, it must be admitted, at a comparatively small expense. But no confident conclusions on the profits of farming are to be drawn from such results as these. So many circumstances of abatement enter into the case, that if these are the only elements given in the case, the solution of the problem would give the most egregiously erroneous and deceptive results.

We are not to look to agriculture for any extraordinary or sudden gains, as for example, like drawing the capital prize in a lottery where there are two blanks to a prize; like some successful East India voyage, where the sale of the cargo yields a nett profit of one hundred per cent; or like some sudden rise in the stocks, or some monopolized article of produce, where a shrewd operation draws its thousands or twenties of thousands into our pockets. But that skill, experience, assiduity, and industry will, in agriculture, yield a fair, and to a reasonable mind, an ample compensation, there are too many and reiterated proofs to admit even of a doubt.

As we said in the beginning, we do not design at this time to go largely into this subject, and we refer to it in particular at this time, for the sake of relating some parts of a conversation which we once had with a respectable and independent but complaining farmer in our own despised State.

This man then had a farm which was fully valued at four thousand dollars. The father, who had given the farm to the son, had begun life without a dollar, had run into debt for a large part of the purchase money, but had sometime since, while he supported his family, earned from the proceeds of the farm, sufficient to pay for it. Without any incumbrance he had then put it into his son's possession, and now lived with him under the same roof.

Said the son, farming is a miserable business!

But why so? Let us look into this matter. What is the estimated value of your farm?

Four thousand dollars.

Is it increasing in value?

Yes; by its favorable location, and by every improvement that is made upon it.

Do you get all the produce from it which it can be made to yield?

No, not one-third. It consists of one hundred and twenty acres. At least fifty acres of it are in wood, and a considerable portion in pasture. Besides that, I have several acres of peat bog, which might be redeemed and brought into English grasses.

What is the value of the wood land?

We supply our family with fuel, and besides this the growth of the wood and the hoop poles which we obtain from it, pays a large interest upon the current value of the land, to that we consider this as one of the most profitable parts of the farm.

Have you done any thing to improve your pasture lands?

No—I suppose I ought to. I tried one hundred weight of plaster spread upon a part of it, and the effects were visible as far as the land could be seen; but then after that, plaster rose *half a dollar* on a ton, and I thought I would not get any more. Then the huckleberry bushes and the sweet fern, and the brakes and alders have come in so that I cannot keep as much stock as I could formerly.

Have you attempted any improvement upon your bog meadows?

No—sometimes I have thought I would. My neighbor J. B. has redeemed eight or ten acres, and now gets two tons and a half of hay to the acre, herds grass and clover and red top of the best quality, where formerly he got scarcely any thing; but then it cost him at least twenty or twenty-five dollars an acre to drain and manure it; and he will have to top dress it at least once in five years or it will never hold out. Then, too, he has put on at least half a bushel or more of grass seed to the acre; and grass seed which I used to buy for twelve cents a pound or two dollars and a half per bushel, is now twenty cents a pound, and herds grass three dollars per bushel. Then too, labor is so high, I cannot afford to hire.

Have you plenty of manure?

No; that is a great want. I have a bog hole where I suppose I could get two hundred loads a year, but then I should have to go more than a mile for it, and it is wet work. I have not any of the advantages which the farmers have who live within six or seven miles of Boston, and can go in and buy a load of good dung whenever they want.

Do you know what these farmers have to pay for manure in Boston?

Why, yes! I have been told they have to give sometimes from three to five dollars a cord at the stables. Sometimes our tavern keeper sells a few loads, but he asks five dollars a cord.

Have you a barn cellar?

No. I have often thought it would be a very good thing, and my barn is well situated for one; but then it would cost, besides what work I should do with my own team, full fifty dollars to make one.

Do you keep cows?

Yes, I keep some just to eat up our coarse fodder; but our women folks do not like dairy work, so we buy our butter and sell our milk to the milk-man for eleven cents a gallon.

Do you keep swine?

Only one or two for our own pork. We do not have any skim-milk or butter-milk for them. Besides there is no great profit in fatting hogs. They will not much more than pay for what feed they will eat. I know they will make a large quantity of manure, but then you must cart in a great deal of stuff into their pens or else they can't make any. But come! I must show you a sow I have got; she is only fifteen months old, and I sold her pigs for more than forty dollars. I suppose I shall make her weigh four hundred in the fall.

Do you raise your own grain and potatoes?

Not all. I raise about three acres of corn and about as much rye, and about six hundred bushels of potatoes. We sell hay and buy Genesee flour. We have tried wheat, but sometimes it is blasted; and it don't make white flour; and our women folks say they cannot make handsome pie-crust or white bread with it.

How many have you in your family?

I have a wife and eight children, and my father lives with me.

Have you any trade?

No; I have nothing but my farm.

Does your farm support your family and pay your labor?

Why, yes! I have nothing else, excepting a little interest that comes from some money which I received for the sale of wood from the farm, sometime ago, which came to about five hundred dollars, and which I put out at interest. We sell enough produce from the farm to pay our hired labor, which costs about a hundred dollars per year, and our store bills and taxes.

We have very much abridged this conversation, and we shall leave it without farther comment. But here is a husbandman on a farm valued at four thousand dollars, not producing more than one-third of what it might be made to produce, yet supporting a family of eleven persons and paying all expenses, excepting the labor and superintendence of one man, and the farm gradually increasing in value by every expenditure, however small, for its improvement; this man too, not working half the time, and he and his family living in the enjoyment of all the luxuries, if they choose to have them, which they can reasonably ask. Let such a man if he will, take his two hundred and forty dollars income and labor no more hours than he does in the country, and go into Boston and try to support his family there. The end of the year would show him a result which would make him ashamed to complain of his present condition. His whole money income of two handred and forty dollars would scarcely pay for his fuel, his taxes, and the rent of a ten-footer. What an evil it is that our farmers do not know their blessings! H.C.

From the New England Farmer.

WHEAT CROP.

The abortive attempts made last year in Massachusetts, produced so much disappointment, that comparatively little wheat was sown this season. What was sown, however, in general looks well; and, unforeseen and uncontrollable accidents excepted, will yield a fair return. We have seen several fields of one, two and four acres, which we have no doubt will yield twenty, twenty-five and thirty bushels to the acre. The failure of the last season was no doubt owing to the severity of the drought in most cases. We are more than ever convinced that in most parts of Massachusetts she may easily supply her own wheaten bread. The great object to be aimed at in order to success, is to bring to the surface a fresh soil. We are satisfied that in many cases, the application of lime to the soil would be highly favorable; in no case applied in any reasonable measure can it do harm; and in all it will be ultimately and permanently beneficial; but as yet we see no reason to alter our early conviction, a conviction not taken up at random and capriciously, but growing out of many facts and careful and reiterated experiments, that it is not indispensable. From the best information we can gather, we consider wheat under proper cultivation is ordinarily as successful as rye; and therefore from its superior value, it may be strongly recommended as a crop with which to stock down our land, when we propose to lay it in grass.

One great deficiency in our cultivation is, that it is too slovenly for wheat. We do not in some cases, take pains to have our lands thoroughly drained, so that no water may stand upon them, and the ground not be left saturated with water during winter, where winter wheat is sowed, or after rains late in the season. Nothing is more prejudicial to wheat than this neglect. In the next place, our grounds are surcharged with weeds.—Wheat is for example, often sown after potatoes.—What can be more rare than a clean potatoe crop? In general potatoes are manured with the coarsest manure; and much of it the sweepings of the barn floor full of chaff; and then they are seldom hoed more than twice, more frequently perhaps, but once in a season, so that the weeds ripen their seeds and fill the ground with a pernicious growth for the next season, among which we could scarcely expect that wheat should flourish. It is not uncommon to see an attempt at raising wheat where the weeds entirely overpower the grain. Success under such circumstances, is certainly not to be looked for. "Can a man gather grapes of thorns or figs of thistles?" In the account given of the agriculture of Norfolk, England, it is said that Lord Erskine, in riding over the farm of the distinguised Mr. Coke, and surveying his extensive fields of wheat, discovered a single plant of lavender among the growing grain. This was deemed quite remarkable; and a premium was offered for any one who would discover any weeds in the growing crop. Mr. Coke we believe not unfrequently gets six and seven quarters (eight bushels to a quarter) of wheat to the acre. Our farmers have no patience for any such cultivation as this, and with ground half prepared, full of weeds, without water furrows to drain off the wet, and perhaps with seed poorly selected and but half cleaned, we complain that we cannot raise wheat. It is matter of more just surprise that with our modes of cultivation, if modes they can be called, we can raise anything. We know of no experiments having been made with the exception of one on a very small scale, of cultivating wheat in drills and hoeing between the drills. This is sometimes done abroad, and Beatson's Cultivator, of which one was imported by the Massachusetts Agricultural Society, is used for cleaning between the drills, which are about eight inches apart. It is, we believe, generally conceded, that the increase of the crop in this case will scarcely pay for the extra labor and pains. It is hardly to be expected with our off-hand and sleight of hand way of doing things, that such cultivation should be ever dreampt of among us. Presently, however, we indulge the hope, that by some enterprising and careful farmer, the experiment at least upon a small scale, will be made among us. We confidently hope in the language of the times, that the good old Bay State will go ahead in the wheat cultivation; and we say in the language of the brave Lawrence, on an occasion of infinitely less importance, "Don't give up the ship."

H. C.

A full blooded short horn Durham calf belonging to Henry S. Randall, of Cortlandville, was weighed last week, when one day old, and weighed *one hundred and twenty-four lbs.* and some ounces.

How to acquire Friends.

If you have lately moved into a place and wish to secure acquitances with individuals and their families; or, if you have resided long in town and have received few attentions or marks of friendship, there is one way in which this object may be certainly secured. The secret is worth knowing, and though it be "a secret," we are willing to confide it to the reader if he will but keep it to himself. First of all, purchase a piece of land sufficiently large for the purpose, and let it be near your domicil. Enclose it with a very high, tight board fence—this will be useful hereafter to enable you to witness the agility of your good neighbor's boys. In the spring manure it liberally and plough it up. Divide it off by walks, into beds and plantations for flowers and fruits. Send to Boston for one hundred grape vines of the finest varieties—they will cost in all not much over $50. Plant them under the fence on the north and west borders, and employ a joiner to make trellises for the vines to run upon. Send also to New York for Prince's early harvest, Apples, Pippins, Pears, Peaches, Plums, Cherries, Quinces, &c. Set these out in the proper places. Procure from Boston or New York several of the most singular varieties of Roses, Honey-Suckles, Dahlias, Lillies, Crocuses, Peonas, and shrubbery of different sorts. In assigning locations to these, have reference to ornament; so that there may not be "too much of a good thing" in one place, but by a mixture keep up an interest. After you have set your gooseberries, currants, red and white, white and black raspberries &c., make your beds and plant melons of different kinds. Wait the operations of nature till the trees and shrubbery begin to produce fruits and flowers, meanwhile employing a gardener to nurse the plants, and keep the weeds down. In the course of a few years, your neighbors, far and near will hear of the attractions you have, and will begin to scrape acquaintance—not in winter—but from the time the flowers appear till the autumnal fruits are gone, and with many marks of a watery mouth dressed in smiles of kindness, will profess remarkable respect and friendship for yourself and family—having an eye all the time to a walk in the garden. There arrived, they will begin by complimenting *your taste*, and trying *their own*. If your young *bon-chretien* pear tree has one pear upon it, half grown, which you have watched with solicitude as the first fruits of your care for it, most likely the kind lady will wish to evince the interest she feels in your success by suddenly jerking it from its stem, and condescending to bite a piece out of it, when, finding it not palatable, she will make a wry face and cast it under foot, as unfit for eating. If it ripened, it would not sell for more than two coppers—so that you have not lost much. There is, however, an end for one year of hope to test the value of this new fruit. So too, with every thing else. You will be sure to have visiters every day, most of whom will begin, as soon as they enter the enclosure to lay their hands on the first flower or fruit that arrests their attention and pluck it off. You will be lucky if every cluster of green grapes is not gathered before one has a chance to ripen.

It will take a pretty large garden, indeed, to feed all the new made friends who swarm into it; but then you will secure acquaintances that will be remarkably polite and friendly as long as your fruit lasts; after which they may not know you, perhaps, till another season.

We have one of this description—a good natured matron as ever lived, who has blessed her husband with ten as sprightly children as the town affords. She never, indeed, calls upon us in winter—for why should ladies go out except in the vernal season? Nor does she condescend to look in upon us in the time of sickness, for this would be undignified. But as soon as pleasant May arrives, from that time weekly she makes her glad appearance, followed by half a score of active boys and girls, who had the promise of a visit before hand, and the way they caper and run over the beds and pluck the flowers and strip off the green fruit, and break down the branches, is a certain evidence of their sprightlines and joy; and who would not expend one five hundred dollars on a garden, and devote his daily attention to it for years, to witness what sprightly children some women can have? A man who would not feel rewarded to see gratified countenances in ladies, and joyful children—had better not make a garden, or if he does, let him put it under lock and key, with a fence that would keep State's prisoners secure, with "I'm sick—I'm dead," on his door and place snarling Jowler at the gate.—*Maine Cultivator.*

The Southern Cultivator,

Pulbished every alternate week, at Columbia, Maury county, Tennessee.

DEVOTED to Agriculture, Horticulture, Stock Farming, and General Improvement. From its location—in one of the wealthiest districts in the South West—and its already extensive and rapidly increasing circulation in Tennessee, Alabama, Mississippi, Kentucky, Arkansas, &c., offers superior inducements for Advertisements of every description.
Aug. 3, 1839.

LOCKLING'S PLOUGH.

WHEREAS Nathan Lockling has appointed Joseph Lee, of the City of Rochester, his general Agent for the sale of Rights to Manufacture his Plough. All communications addressed as above will be promptly attended to.

The above Plough has been in successful opperation in the Counties of Genesee, Livingston and Monroe for three years past, and it is confidently recommended by the following highly respectable Farmers:—

L A Ward, Samuel P St. John, W H Steels, G W Stevens, E L Arnent, Elijah Wilcox, E W Porter, Gideon Osborn, James D Mc Curdy, J H Consalus, Dyer Kingsley, Michael Dusbrach, W S Fullerton, R W Fitch, Jas. Hutchinson, Agent for James Wadsworth, Frederick Marshall, Egbert Coleman, James Abbott, Wm H Reynale, Luther Melion, Leander Bevery, S R T Wood, Darius Markham, J P Price, Wm Wells, Henry Wagoner, Othinal Bagler, Henry Kelsey, J T Beach, Joseph Bowers, W F Rees, P W Clark, Cyrus Jones, Eli Bullock, Dansville.

MR. LOCKLING—Sir, We hereby certify that we have used the Lockling Patent Plough, for some time and can safely recommend it to the consideration of the Farming Community as being the best article of the kind we have ever used. It turns a clean handsome furrow, and draws one-third easier than any Plough within our knowledge.

Judge Roseburgh, Groveland; Ezra Roseburgh, Brighton, Isaac Moore, do.; John Nutt Mt. Hope, John Stanley, do.; W H Scott, Genesco, Gen. D McNair, do.; Horace Miller Mt Morris.

To N. LOCKLING, Esq. Hermitage, May 4, 1838.

Dear Sir—I consider your Lockling Patent Plough a perfect article. It runs deep and light, and makes a fine large furrow. I think it well worthy the attention of all farmers. Yours truly,
ANDREW JACKSON.

☞ It is warranted to run with one-third less labor, in any kind of ploughing than any other Plough now in existence.
JOSEPH LEE, General Agent,
June 10-w8m3t 41 Exchange-st, near the canal, Rochester.

Silk Worm Eggs.

FOR Sale, 100,000 Silk Worm Eggs, by ELLWANGER & ROGERS, Greenhouse, corner of Buffalo and Sophia streets, Rochester.
August 3, 1839.-w3t

Green's Straw Cutter.

THE subscriber having obtained the agency for the sale of Green's Patent Straw Cutter, (of C. G. Jones, Esq. of Lockport, the manufacturer,) will have the same on hand at his store, No. 3 Exchange-street, Rochester, Monroe county, N. Y.

All orders, with amount enclosed, (25 dollars,) (price is reduced,) will meet prompt attention.

I will attend to the shipment of them for any part of the United States.
EBENEZER WATTS.
Rochester, August 3, 1839.-w1t-m3t

Farmers save your own Clover Seed.

THE subscribers having purchased the exclusive right of making, using and vending, in the counties of Monroe and Niagara, RITTENHOUSE'S PATENT CLOVER MILL, being the latest improvement, and the article now used in Pennsylvania and in Seneca county, would respectfully inform the farmers of those counties, that they will this fall furnish one or more PORTABLE MILLS in each of said counties, to be worked by horse power, which they will take to farmer's barns whenever required, and hull out their CLOVER SEED for them at the very cheap rate of One Dollar per bushel.—These machines will hull from one to three bushels per hour, according to the quality of the chaff. FARMERS will at once perceive the vast saving and convenience afforded to them by this invention, as instead of paying from SIX to SIXTEEN Dollars per bushel for their Clover Seed, and perhaps getting a quantity of Canada Thistle or other foul seed in the bargain, they can now save their own seed, know that it is clean, and have it hulled at their own barns, for the trifling expense of One Dollar per bushel!

For further information, application can be made, either personally or by letter, (post paid,) to the subscribers at Gaines, Orleans county.
CHANCY WOODWORTH & CO.
July 27, 1839.-w3m-m1t*

Morus Multicaulis.

THE subscriber is prepared to furnish Morus Multicaulis (Mulberry) Trees, in large or small quantities, delivered any time this fall after the first of October. The trees will be raised from Roots, Layers and Cuttings, of thrifty growth and matured wood, and will be sold at prices in proportion to their size. October and November are the most favorable months to transport them to the Western States, or into Canada, or in any direction where they must be sent a distance by water communication. All orders from a distance, by mail, should be sent early, (post paid,) addressed to
E. H. MIX,
July 27, 1839.-w6m Avon, N. Y.

Saxony Ewes.

THE Subscribers will let for a term of years, to responsible farmer, fifteen hundred Ewes, in lots of fifty or upwards, to be taken after weaning their lambs.

These Sheep belong to the White Springs flock, which is well known to be as fine as any in the country.

Terms made known on applicatton to either of the subscribers.
ROBERT C. NICHOLAS,
Geneva, July 6, 1839.-w3m JOHN NICHOLAS.

Agricultural Warehouse and Seed Store.

79 Barclay-street, New-York.

AT this old established stand, the subscribers take pleasure in announcing to the public, that they have made extensive arrangements to accommodate farmers in all articles connected with husbandry, viz:—Agricultural implements, a full and fresh supply of Field and Garden Seeds, Fruit Trees, Durham Cattle, Chinese and Berkshire pigs, 10,000 Morus multicaulis Mulberry trees; Publications on Rural subjects, &c.

Published here the Rural Library, S. Fleet, editor, a few copies of 1st vol. for sale. The object of this work is to constitute a Library at the least possible expense. 2d vol., commencing with Professor Low's Elements of Practical Agriculture, with nearly 250 fine engravigns; subscription $3. Subscriptions received for the Genesee Farmer, Cultivator, &c. &c.
J. W. WEAVER & CO.
April 20-wm1y 76 Barlay-st, New-York

GRINDSTONES,

OF a Superior quality and warranted. If they do not answer the expectations of the purchaser, they may be returned and the money refunded. For sale at the Rochester Edge Tool Manufactory, office on Front Street, a few rods north of Main Street bridge.
june 29-w3m-m1t D. R. BARTON.

Great Sale of Improved Short Horn Cattle, and Blood Horses.

THE subscribers will sell at Auction, on Tuesday, the 10th day of September next, at the farm of Samuel Allen, on the Niagara river, two miles below Black Rock, the entire stock of Improved SHORT HORN CATTLE, for several years past bred on the farm of L. F. ALLEN, on Grand Island.

The herd consists of about 30, including COWS, BULLS, HEIFERS and CALVES. Several of them have been imported by one of the subscribers direct from England, and with their produce, are surpassed by few animals in the country. In addition to these, every animal offered is the direct descendant of thorough bred imported stock, and of unquestionable purity of blood.

With the above will be sold, 20 select and beautiful animals, consisting of pure DEVON; crosses of different degrees between the Devon and Improved Short Horn; crosses of the Alderney, and of the Ayrshire, with the Short Horn. These are cows, heifers and calves; all superior animals.

ALSO—The superb Horse "BELLFOUNDER," (got by Imported "Bellfounder," the best thorough bred trotting horse ever in America, and out of the imported Mare "Lady Allport," bred by T. T. Kissam, Esq. of Long Island. The stock of this horse is unsurpassed in the country for size, speed and action. Together with several elegant THOROUGH BRED BREEDING MARES, and Fillies, and two or three young horse Colts, the produce of the above. These animals are of the highest character as roadsters; and as trotters, no blood in the country has excelled them. They are all from the best stables of Long Island. Also, a beautiful pair of full bred matched Fillies, 5 years old. All these horses are blood bay.

This entire stock will be sold without reserve to the highest bidder, commencing at 10 o'clock, A. M. They can be shipped within an hour from the farm on board the steamboats to go up the lakes, or on board the canal boats at the farm. Catalogues of the animals, with descriptions and pedigrees, will be prepared, and the stock may be viewed at the farm previous to the sale.

A credit of 60 days will be given on approved notes, or acceptances, payable at a bank either in Buffalo, Albany, or New-York, for all sums over $300.
LEWIS F. ALLEN,
Black Rock, N. Y. June 25, 1839. SAMUEL ALLEN.

Superior Grindstones.

AND warranted. They are from the celebrated quarry at Berea, Ohio. If they do not answer the expectations of the purchaser, they may be returned and the money refunded. Be particular to enquire for "*Berea Grindstones.*" For sale wholesale and retail.
D. M. VANDERPONL,
No. 17, Webster's Buildings, Main street.
Buffalo, N. Y. July 20, 1839.-w3t.

Horse Rakes.

AS some inquiry has been made through this paper relative to Horse Rakes, the subscriber would take this opportunity to say to its patrons, and all others, that he is offering to the public the latest improved Revolving Horse Rake, which can be had at the following places:

Rochester—C. Hendrix. *Auburn*—Hyell, Watrous & Co. *Elmira*—Robert Cevell, jr. & Co. *Burdett*—E. Baker & Co. *Ovid*—P. Himrod & Son. *Genoa*—H. G. Bushnell. *Waterloo*—J. L. Lundy & Co. *Seneca Falls*—J. C. Chapman. *Geddes*—S. H. Mann. *Syracuse*—Wright & Wheaton. *Ithaca*—Wm. R. Collins. *Lenox*—Horace Hall. *Chittenango*— —— Crouse; and many other places not here mentioned.

Those who wish to purchase, would do well to give us a call.
AMOS HOLBROOK.
Whitesboro', June 12, 1839. jun 24

Fruit Trees for Sale.

THE subscriber respectfully informs his friends and the public that he has for sale at his Nursery in Rochester, Monroe county state of New York, a large quantity of Fruit Trees, grafted and inoculated with the most approved kinds, now fit for transplanting, which he will sell on the most reasonable terms.
April 15, 1838. SAMUEL MOULSON.
N. B. Cash will be paid for a few thousand two years old APPLE TREES.

Great and Timely Arrivals!

AT THE ROCHESTER SEED STORE.—The subscriber is happy to inform his friends and customers, that he has just received direct from England, a very large supply of imported Seeds, of such kinds, and in such quantities, as will meet the demands of the public, and of such quality as cannot fail to give satisfaction. Among them are,

1,500 lbs. English Purple Top Ruta Baga,
800 lbs. English and Scotch assorted Turnep,
650 lbs. Mangel Wurtzel,
300 lbs. French White and Yellow Sugar Beet,
175 lbs. Long Orange, and Altringham Carrot,
150 lbs. Yellow Dutch, and White Portugal Onion,
500 lbs. Cabbage, Cauliflower, Broccoli, and Radish,
450 lbs. White Dutch Clover, Trifolium Incarnatum.

Also—New Orchard Grass, Pacey's perennia and Italian Rye Grass, Spring Tares, Potatoe Oats, Winter Oats, many new varieties of Peas and Beans, together with a multitude of smaller articles.

Also—Nearly one hundred varieties of the choicest English FLOWER SEEDS. (These will speedily be put up in small papers, price 5 cents each, 50 cents per dozen.)

Also—Just received, a good supply of THORBURN'S CHINESE TREE CORN, and ROHAN POTATOES.

Orders already received will be immediately attended to.

All orders from a distance must contain a remittance, or good reference in this city.

☞ Agents will receive new supplies as soon as possible.
May 1, 1839. M. B. BATEHAM.

☞ *Oswego Agency.*—M. B. ENSON, Druggist, Oswego, is Agent for the Rochester Seed Store. A good assortment of Seeds may be found there.

Monroe Horticultural Garden and Nursery,

GREECE, MONROE COUNTY, N. Y.

THIS establishment now comprises over 20 acres, covered compactly with trees and plants in different stages of their growth.

The subscriber offers to the public a choice selection of Fruit Trees, of French, German, English and American varieties, consisting of Apples, Pears, Plums, Peaches, Cherries, Apricots, Nectarines, Quinces, Currants, Gooseberries, Raspberries Grape Vines, Strawberries, Ornamental Trees, Shrubs, Plants, Hardy Roses, Vines, Creepers, Herbaceous Perennial Plants, Bulbous Roots, Splendid Paonies, Double Dahlias, &c. &c.

Also, a large collection of Green House Plants, of choice and select varieties, in good condition.

Orders respectfully solicited. Trees and Plants, when ordered, are carefully selected and faithfully packed, and if desired, delivered on the Canal, one mile from the Nursery, or at Rochester.

Orders for Mr. Rowe's Nursery received by the publisher of this paper.

Catalogues will be sent to every applicant, gratis, or may be had by calling at the office of the Genesee Farmer.
April 1, 1838. ASA ROWE.